

FOCUS

A PUBLICATION OF THE

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August 2003

Infant Mortality Increases in Missouri in 2002

Missouri's infant death rate increased by 15 percent in 2002 from 7.4 per 1,000 live births in 2001 to 8.5 in 2002. The 8.5 rate is the highest state infant death rate in ten years. Nationally, the infant death rate increased very slightly for January-September 2002 (the latest available data) from 6.8 to 6.9 per 1,000 live births. Missouri infant mortality increased throughout the state, and in both neonatal (under 28 days of age) and post-neonatal (aged 1-11 months) mortality.

The Missouri increase was much larger among white infants than among African-American infants. The white infant death rate increased by 22 percent from 5.8 in 2001 to 7.1 per 1,000 live births in 2002, while the African-American rate increased just 2 percent from 16.8 to 17.2. Despite these trends, the African-American infant death rate was still 2.4 times higher than the white rate in 2002.

Table 1

Vital Statistics for Missouri: 1992, 2001 and Provisional 2002

	<i>Numbers</i>			<i>Rates per 1,000 Population</i>		
	1992	2001	2002 (Prov)	1992	2001	2002 (Prov)
Births	76,005	75,290	75,167	14.6	13.4	13.2
Deaths	50,893	54,601	55,636	9.8	9.7	9.8
Natural increase	25,112	20,689	19,531	4.8	3.7	3.4
Marriages	45,546	42,086	41,552	8.8	7.5	7.3
Divorces	25,926	23,458	22,593	5.0	4.2	4.0
Infant deaths	647	555	638	8.5*	7.4*	8.5*
Abortions	16,240	12,266	12,236	213.7*	162.9*	162.8*
Population (1000s)	5,193	5,637	5,673			

*Per 1,000 live births

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The higher infant mortality represents both an increase in babies being born too small and an increase in death rates for these small babies. The number of very low birth weight (VLBW, under 3 pounds 5 ounces) infants increased by 11 percent from 1,069 in 2001 to 1,188 in 2002. The low birth weight (under 5 pounds 8 ounces) increased from 7.6 percent to 8.1 percent, the highest rate since the 1960s. When adjusted for these changes in birth weight distribution, the infant death rate still increased (by 8 percent as opposed to the 15 percent unadjusted infant mortality increase).

Possible reasons for the increase in infant mortality include the following:

- Greater efforts are being made to resuscitate VLBW infants at borderline viability. These lead to more VLBW births and possibly eventual infant deaths.
- More twins and triplets are being born, many as a result of infertility treatments (e.g. in-vitro fertilization, artificial insemination,

medications). The number of multiple births increased by about 10 percent in 2002 and by 40 percent since 1992. The infant death rate for multiple births was 6 times the rate for singleton births in 2002.

- More C-Sections and induced labor are being performed at earlier gestational ages, which also leads to more VLBW births.
- More infants with congenital anomalies were born.
- There was a large increase in three potentially preventable post-neonatal causes of death: SIDS, infectious diseases, and unintentional injuries.
- Increased efforts have been made recently to identify and report all infant deaths. Vital Records staff has worked closely with the Child Death Review Project to improve reporting.
- The number of infant deaths in any given year is subject to random fluctuation.

Table 2
Trends in Maternal and Child Health Statistics: Missouri 1992, 2001 and Provisional 2002

	<i>Numbers</i>			<i>Rates</i>		
	1992	2001	2002 (Prov.)	1992	2001	2002 (Prov.)
Infant Deaths	647	555	638	8.5	7.4	8.5
White	426	361	437	6.9	5.8	7.1
Black	212	186	188	16.0	16.8	17.2
Low Birth Weight	5,579	5,759	6,057	7.3	7.6	8.1
White	3,688	4,182	4,339	6.0	6.8	7.0
Black	1,809	1,405	1,530	13.6	12.7	13.9
Inadequate Prenatal Care	12,186	7,823	7,780	16.5	10.8	10.8
White	7,591	5,350	5,286	12.6	8.9	8.8
Black	4,393	2,144	2,133	35.6	21.8	21.5
Birth Spacing<18 mos.	6,188	4,725	4,568	14.0	11.0	10.7
Out-of Wedlock Births	23,981	26,209	26,489	31.6	34.8	35.3
Teen(10-19) Births	11,042	9,426	8,964	14.5	12.4	11.9
Early Teen (10-17) Births	4,147	2,938	2,785	5.5	3.9	3.7
Smoking During Pregnancy	17,725	13,761	13,607	23.3	18.3	18.1
Medicaid Births	28,776	30,515	31,891	39.0	42.2	44.3
WIC Births	27,261	29,284	30,124	36.9	40.5	41.9
Food Stamps Births	18,025	12,852	14,042	24.4	17.8	19.5
Live Births	76,005	75,290	75,167			

Other maternal and child health statistics show the following:

- Teen births decreased by 4.9 percent from 9,426 in 2001 to 8,964 in 2002. This is a continuation of a decade-long trend as teen births have decreased by 19 percent since 1992.
- Smoking during pregnancy decreased slightly from 18.3 percent in 2001 to 18.1 percent in 2002. It has dropped from 23.3 percent in 1992.
- Short birth spacing (less than 18 months between births) decreased from 11.0 percent in 2001 to 10.7 percent in 2002.
- Births on Medicaid, WIC and Food Stamps all increased in 2002 with the continued economic slowdown.
- The rate of inadequate prenatal care stayed the same in 2001 and 2002 (10.8 percent).

Total deaths increased by 1.9 percent in 2002 as 55,636 Missourians died compared with 54,601 in 2001. The five leading causes of death remained the same in 2002: heart disease, cancer, stroke, chronic lung disease and unintentional injuries. Heart disease deaths increased by less than one percent, stroke mortality increased by 2.4 percent while unintentional injury deaths increased by 5.6 percent. Motor vehicle crashes, the leading cause of unintentional injury fatalities, increased by 8.8 percent from 1,081 in 2001 to 1,175 in 2002. Cancer and chronic lung disease deaths both decreased slightly in 2002. The sixth through tenth leading causes of death all increased in 2002. These include pneumonia and influenza, diabetes, Alzheimer's disease, kidney disease, and septicemia. On the other hand, suicide, homicide and AIDS deaths all decreased in 2002.

Table 3
Leading Causes of Death with Rates: Missouri Residents 1992, 2001 and Provisional 2002

	<i>Numbers</i>			<i>Rates per 100,000 Population</i>		
	1992	2001	2002 (Prov)	1992	2001	2002 (Prov)
<u>Leading Causes of Death</u>						
Heart	17,776	16,453	16,574	343.3	291.9	292.2
Cancer	11,852	12,289	12,264	229.0	218.0	216.2
Lung cancer	3,607	3,713	3,776	68.1	65.9	66.6
Stroke	3,479	3,788	3,880	67.0	67.2	68.4
Chronic lung disease	2,252	2,861	2,857	41.2	50.8	50.4
Unintentional injury	1,990	2,439	2,575	40.1	43.3	45.4
Motor vehicle	1,008	1,081	1,175	19.9	19.2	20.7
Other	982	1,358	1,401	20.2	24.1	24.7
Pneumonia & influenza	1,898	1,594	1,621	36.7	28.3	28.6
Diabetes	1,080	1,514	1,616	21.4	26.9	28.5
Alzheimer's disease	339	1,111	1,192	5.4	19.7	21.0
Nephritis & nephrosis	578	985	1,064	10.4	17.5	18.8
Septicemia	414	615	806	8.2	10.9	14.2
Suicide	635	734	682	13.9	13.0	12.0
Homicide	585	423	371	11.0	7.5	6.5
AIDS	458	150	123	6.7	2.7	2.2
Maternal Deaths	7	8	9	9.2**	10.6**	12.0**

**Per 100,000 live births

(Focus continued)

With the increase in total deaths and infant deaths the Missouri life expectancy decreased in 2002 to 76.2 years from 76.4 years the previous year. Most of this decrease was due to a decrease in male life expectancy from 73.7 years in 2001 to 73.3 years in 2002. Female life expectancy also decreased, but by only 0.1 years, from 79.0 to 78.9 years. The differential between the sexes is now 5.6 years compared with 5.3 years in 2001 and 5.2 years in 2000. The increase in the life expectancy differential by sex is a reversal of the trends during the 1980s and 1990s.

Other Missouri vital statistics show a continued decline in marriages and divorces. Marriages decreased from 42,086 in 2001 to 41,552 in 2002, the lowest count since 1965 while divorces decreased from 23,458 to 22,593, the lowest count since 1974, the first year of the Missouri no-fault divorce law. Abortions decreased slightly in 2002 from 12,266 in 2001 to 12,236 in 2002, the lowest resident abortion total since 1976.